REMARKS

By this amendment, Applicants have amended the claims to more clearly define their invention. In particular, the claims have been amended to eliminate the reference numerals therefrom. Applicants have also canceled non-elected claims 10-19 without prejudice or disclaimer and have added new claims 20-26 to define further aspects of the present invention. Claims 20-26 correspond to claims 3-9, respectively, but depend from claim 2.

Claims 1-9 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 4,344,373 to Ishii et al. Applicants traverse this rejection and request reconsideration thereof.

The presently claimed invention is directed to a facility for producing synthesis gas from a solid feedstock including organic matter, the facility including means for circulating a heat-carrying solid providing at least some of the heat necessary for such production, a zone Z1 including pyrolysis and gasification means, a zone Z2 including separation means, a zone Z3 including gasification means, a zone Z4 including separation means, and a zone Z5 including combustion means.

According to the present invention:

- the zone Z1 has means for pyrolysis and gasification of the feedstock in a transported fluidized bed,
- the zone Z2 has means for at least partial separation of the effluents from zone Z1 into an essentially gaseous phase and into an essentially solid phase,
- the zone Z3 is supplied at least in part with the essentially solid phase and includes dense fluidized bed gasification means for gasification of the essentially solid phase,

- the zone Z4 includes means for separating the effluents coming from zone Z3 into an essentially gaseous phase and into an essentially solid phase,
- the zone Z5 includes means for combusting the essentially solid phase coming from zone Z3 and means for transferring the heat-carrying solid coming from the combustion into zone Z1.

The Ishii et al. patent discloses a two bed pyrolysis system of organic material including a fluidized bed pyrolysis reactor (11) in which municipal waste or the like is to be pyrolyzed, a cyclone (18) for separating char from the pyrolysis gas coming from the reactor (11), a fluidized bed contained in a regenerator (12) receiving the char coming from the cyclone (18) and a dust cyclone (30) for collecting the ash or the dust contained in the exhaust gas of the regenerator (12).

The Office Action appears to allege than, in Ishii et al., the zone Z1 of the present invention could be the fluidized bed pyrolysis reactor (11), the zone Z2 could be the cyclone (18), the zone Z3 could be the regenerator (12) with a fluidized bed and the zone Z4 could be the dust cyclone (30). However, even assuming, arguendo, this to be true, the present invention to Ishii et al. fails to disclose a zone (the zone Z5 of invention) comprising means for combusting the solid phase coming from the regenerator (our zone Z3) and means for transferring the heat-carrying solid coming from the combustion into the reactor. Therefore, the presently claimed invention is not anticipated by Ishii et al. under 35 U.S.C. §102(b).

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 612.43484X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

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